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Raymond C. Kurzweil

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EXAMINER

GODBOLD, DOUGLAS

ART UNIT

PAPER NUMBER

2626

NOTIFICATION DATE

DELIVERY MODE

07/14/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No. 10/730,485	Applicant(s) KURZWEIL, RAYMOND C.	
	Examiner DOUGLAS C. GODBOLD	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-16 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-16 and 19-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to correspondence filed May 14, 2009 in reference to application 10/730,485. Claims 1, 2, 5-16, and 19-29 and pending and have been examined.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 14, 2009 has been entered.

Response to Amendment

3. The amendments filed May 14, 2009 have been considered and accepted in this office action. Claims 1, 2, 5-16, 19-28 have been amended, and claims 3, 4, 17, 18, 30 and 31 have been cancelled.

Response to Arguments

4. Applicant's arguments filed May 14, 2009 regarding some aspects of Smith et al. have been fully considered but they are not persuasive. The applicant argue that Smith et al does not specifically teach generating follow up messages to present to a user,

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however the examiner respectfully disagrees. Column 7 lines 19-46 lay out a recommendation service that presents recommended products to a user, which may be based on previous purchases (line 42). Because a “message” is not defined otherwise, they may be interpreted to include product recommendations presented to a user. Furthermore, because transactions are not defined otherwise, they may be interpreted to include previous purchases. Therefore Smith teaches generating follow up messages to present to a user based on transaction information in a database.

5. Applicant's arguments with respect to claim 1, that Smith does not teach analyzing follow up messages, have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. **Claims 1, 2, 5-16, and 19-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over BENNETT (US Patent 7,050,977) in view of SMITH (US Patent 6,853,982) and further in view of HERZ et al. (US PAP 2001/0014868).

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8. Regarding **claim 1**, BENNETT teaches a computer implemented method of conducting commerce using or more computers ("e-commerce applications", column 8, lines 44-45), the method comprising:

receiving transaction requests as text input ("outputs recognized speech text corresponding to the user's question", column 11, lines 14-15, checking prices and availability of items are commercial transaction; column 8 line 45-50);

using one or more computers executing natural language processing to analyze the text inputs to build a conversation based on the transaction requests ("natural language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conducting transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generating a voice-synthesized response in accordance with the commercial transaction through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26);

tracking the commercial transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7).

BENNETT does not specifically teach generation of follow-up messages and analyzing, statistically, a plurality of tracked transactions made by plural users to produce market research information.

In the same field of e-commerce, SMITH teaches

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generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation) and

analyzing, statistically, a plurality of tracked commercial transactions made by plural users to produce market research information (figure 3A, described column 14 line 44 to column 15 line 8, teaches histories for all users are considered in order to determine similar items and from there generate recommendations, which is in fact market research information. It is inherent that by using histories, statistical analysis is necessary in order to generate recommendations.)

Therefore it would have been obvious to combine the market research of SMITH with the system of BENNETT in order to allow for recommendations to be made to a user that are relevant to the current session of the user (SMITH column 1 lines 10-12).

BENNETT and SMITH do not specifically teach that the follow-up messages with the user are statistically analyzed to generate marketing related information.

In the same field of e-commerce, HERZ teaches that the follow-up messages with the user are statistically analyzed to generate marketing related information (paragraph 0037 describes creating recommended offers based on previous offers and whether they have been accepted by a user).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use previous recommendations in the generation of new ones as

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taught by HERZ in the system of BENNETT and SMITH in order to more accurately provide meaningful recommendations.

9. Regarding **claim 2**, BENNETT further teaches that tracking comprises: searching a database to find related information associated with conducting the transaction ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16).

10. Regarding **claim 5**, BENNETT further teaches that one of the transaction is a user request as to order status for an order being tracked in the database (see FIG. 18, block 1860, "view your orders").

11. Regarding **claim 6**, BENNETT further teaches that generating the response comprises:

searching a database for content related to one of the transactions request ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16); and

animating the avatar with a voice and facial movements corresponding to content found in the database ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26).

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12. Regarding **claim 7**, BENNETT further teaches that animating comprises generating helpful verbal suggestions for conducting one of the transactions ("told by character 1440 about how to elicit the information required", column 36, lines 14-15).

13. Regarding **claim 8**, BENNETT further teaches that animating comprises processing text input from the user with natural language processing techniques to develop and build conversations between a user and the avatar ("an environment that emulates a normal conversational human-like question and answer dialog", column 36, lines 28-29).

14. Regarding **claim 9**, BENNETT further teaches that receiving one of the text input is in response to a suggestion generated by the avatar ("told by character 1440 about how to elicit the information required", Column 36, lines 14-15).

15. Regarding **claim 10**, BENNETT and HERZ further teaches that generating additional follow-up responses an inquiry for financial information (BENNETT "account information", FIG. 18, column 37, lines 34-35 and HERZ, paragraph 0029, income is used as a factor when determining offers).

16. Regarding **claim 11**, BENNETT further teaches that the one of the transactions involves a sales transaction ("ordering", FIG. 18, column 37, line 33).

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17. Regarding **claim 12**, BENNETT further teaches that one of the transactions involve a help desk inquiry that involves customer support for a product or service ("e-support", column 36, lines 55-67).

18. Regarding **claim 13**, BENNETT further teaches that one of the transaction involves a report for customer support to report a malfunctioning product, system, or service ("a 'monitor' problem, a 'keyboard' problem, a 'printer' problem, etc", column 36, lines 64- 65).

19. Regarding **claim 14**, BENNETT further teaches that one of the transactions involves processing an inquiry (see FIG. 5, the query is processed by a number of different modules).

20. Regarding **claim 15**, BENNETT teaches a computer program product ("microcode and software routines", column 38, lines 57-58) residing on a computer readable medium ("suitable machine-readable format", column 38, line 61), for conducting commerce ("e-commerce applications", column 8, lines 44-45) comprises instructions for causing a computer to:

receive transaction request as text input ("outputs recognized speech text corresponding to the user's question", column 11, lines 14-15);

analyze the text input using natural language processing to build conversations with the user based on the transaction request ("natural language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conducting a commercial transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generate a voice-synthesized response in accordance with the commercial transaction through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26);

track the commercial transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7).

BENNETT does not specifically teach generation of follow-up messages and analyzing, statistically, a plurality of tracked commercial transactions made by plural users to produce market research information.

In the same field of e-commerce, SMITH teaches generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation) and

analyze, statistically, a plurality of tracked commercial transactions made by plural users to produce market research information (figure 3A, described column 14 line 44 to column 15 line 8, teaches histories for all users are considered in order to determine similar items and from there generate recommendations, which is in fact

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market research information. It is inherent that by using histories, statistical analysis is necessary in order to generate recommendations.)

Therefore it would have been obvious to combine the market research of SMITH with the system of BENNETT in order to allow for recommendations to be made to a user that are relevant to the current session of the user (SMITH column 1 lines 10-12).

BENNETT and SMITH do not specifically teach that the follow-up messages with the user are statistically analyzed to generate marketing related information.

In the same field of e-commerce, HERZ teaches that the follow-up messages with the user are statistically analyzed to generate marketing related information (paragraph 0037 describes creating recommended offers based on previous offers and whether they have been accepted by a user).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use previous recommendations in the generation of new ones as taught by HERZ in the system of BENNETT and SMITH in order to more accurately provide meaningful recommendations.

21. Regarding **claim 16**, BENNETT further teaches that the instructions to track comprise instructions to:

search a database for related information associated with conducting the transaction ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16).

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22. Regarding **claim 19**, BENNETT further teaches that one of the transactions is a user request as to order status for an order being tracked in the database (see FIG. 18, block 1860, "view your orders").

23. Regarding **claim 20**, BENNETT further teaches that the instructions to generate the response comprise instructions to:

search a database for content related to one of the transaction requests ("set of potential questions corresponding to the user's query are received as a result of a full-text search", column 25, lines 15-16); and

animate the avatar with a voice and facial movements corresponding to content found in the database ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26).

24. Regarding **claim 21**, BENNETT further teaches that the instructions to animate comprise instructions to generate verbal suggestions for conducting one of the transactions ("told by character 1440 about how to elicit the information required", column 36, lines 14-15).

25. Regarding **claim 22**, BENNETT further teaches that the instructions to animate comprise instructions to use natural language processing to develop and build conversations between a user and the avatar ("an environment that emulates a normal conversational human-like question and answer dialog", column 36, lines 28-29).

26. Regarding **claim 23**, BENNETT and HERZ further teaches that generating additional follow-up responses an inquiry for financial information (BENNETT "account information", FIG. 18, column 37, lines 34-35 and HERZ, paragraph 0029, income is used as a factor when determining offers).

27. Regarding **claim 24**, BENNETT further teaches that one of the transactions involves a sales transaction ("ordering", FIG. 18, column 37, line 33).

28. Regarding **claim 25**, BENNETT further teaches that one of the transactions involves a help desk inquiry that involves customer support for a product or service ("e-support", column 36, lines 55-67).

29. Regarding **claim 26**, BENNETT further teaches one of the transactions involves a report for customer support to report a malfunctioning product, system, or service ("a 'monitor' problem, a 'keyboard' problem, a 'printer' problem, etc", column 36, lines 64-65).

30. Regarding **claim 27**, BENNETT further teaches that one of the transactions involves processing an inquiry (see FIG. 5, the query is processed by a number of different modules).

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31. Regarding **claim 28**, BENNETT teaches a system for conducting commerce, the system comprising: a server computer (see FIG. 1, block 180, "server-side") for

receiving a transaction requests as text input ("outputs recognized speech text corresponding to the user's question", column 11; lines 14-15);

analyzing the text input using natural language processing to build conversations based on the transaction request ("natural language engine 190 facilitates structuring the query to database 188", column 11, lines 20-22);

conducting the commercial transaction with the user based on the text input ("retrieves an appropriate answer", column 11, line 19);

generating a voice-synthesized response in accordance with the transactions through an avatar ("expressed as oral feedback by animated character agent 157", column 11, lines 25-26); and

tracking the commercial transaction by storing the transaction in the database ("noun phrases of the string are stored", column 25, line 7).

BENNETT does not specifically teach generation of follow-up messages and analyzing, statistically, a plurality of tracked transactions made by plural users to produce market research information.

In the same field of e-commerce, SMITH teaches

generating follow-up messages to send to the user ("generates a list of additional items that are predicted to be of interest to the user", column 7, lines 30-32) that are based on added information stored in the database (see column 9, lines 37-52, a list of information used to generate the recommendation) and

analyzing, statistically, a plurality of tracked commercial transactions made by plural users to produce market research information (figure 3A, described column 14 line 44 to column 15 line 8, teaches histories for all users are considered in order to determine similar items and from there generate recommendations, which is in fact market research information. It is inherent that by using histories, statistical analysis is necessary in order to generate recommendations.)

Therefore it would have been obvious to combine the market research of SMITH with the system of BENNETT in order to allow for recommendations to be made to a user that are relevant to the current session of the user (SMITH column 1 lines 10-12).

BENNETT and SMITH do not specifically teach that the follow-up messages with the user are statistically analyzed to generate marketing related information.

In the same field of e-commerce, HERZ teaches that the follow-up messages with the user are statistically analyzed to generate marketing related information (paragraph 0037 describes creating recommended offers based on previous offers and whether they have been accepted by a user).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use previous recommendations in the generation of new ones as taught by HERZ in the system of BENNETT and SMITH in order to more accurately provide meaningful recommendations.

32. Regarding **claim 29**, BENNETT further teaches:

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a client system (see FIG. 1, block 150, "client-side") for sending the text input to the server ("set of speech vectors that are transmitted over communication channel 160", column 11, lines 8-9), with the client system executing a web browser program ("web page in browser 1200", column 38, line 2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS C. GODBOLD whose telephone number is (571)270-1451. The examiner can normally be reached on Monday-Thursday 7:00am-4:30pm Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DCG

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626